	Application No.	Applicant(s)
Notice of Allowability	09/996,169	KRAMSKOY, JEREMY PAUL
	Examiner	Art Unit	
	VAN H. NGUYEN	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to *Applicant's amendments and supporting arguments filed 01/18/05.*

2. ☒ The allowed claim(s) is/are *1-20*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

     * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

     (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____ .

     (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

MENG-AI T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Examiner's Amendment

I.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

II.   Authorization for this examiner's amendment was given in a telephone interview with

Mr. Frank M. Linguiti (Reg. No. 32, 424) on June 6, 2005.

III.   **The application has been amended as follows:**

All previous copies of claims 6 and 14 have been replaced with the following clean copy

of claims 6 and 14 as amended by the Examiner's amendment:

Claim 6.   A computer-implemented method of increasing the execution speed of invoking a

plurality of Methods in an execution device, the plurality of Methods associated with one or

more classes, the method comprising:

        establishing a single frame size determining template for comparing the single

frame size determining template with each of the Methods of the plurality of Methods when

they are invoked, the single frame size determining template having a set of frame size

determining criteria representative of a predetermined number of words for determining the size of activation frames when creating the activation frames;

for each one of the Methods,

determining whether a word number requirement of the one Method conforms to the frame size determining criteria of the single frame size determining template;

conditionally creating a fixed size activation frame regardless of an exact stack requirement of the one Method, based on the set of frame size determining criteria of the single frame size determining template if the word number requirement of the one Method conforms to the set of frame size determining criteria of the single frame size determining template;

conditionally creating an activation frame to match the one Method's exact stack requirements if the word number requirement of the one Method does not conform to the set of frame size determining criteria of the single frame size determining template;

spatially optimizing the Method to provide a Method access structure;

associating the Method access structure with the Method such that the Method access structure is contiguous with the code of the Method;

conditionally creating a Method routing structure external to the Method access structure and pointing to the Method access structure for each class; and

rewriting invocation bytecodes to a form that includes an indication of the Method routing structure.

Claim 14. An execution system for increasing an execution speed of invoking Methods of

one or more classes, the system comprising:

memory; and

a virtual machine operable to access the memory, to create a representation of at

least one of the Methods based on a single frame size determining template for comparing

the single frame size determining template with each of the Methods of the plurality of

Methods when they are invoked, the single frame size determining template having a set of

frame size determining criteria representative of a predetermined number of words for

determining the size of activation frames when creating the activation frames, to

conditionally create a representation of at least one of the Methods based on exact stack

requirements, to spatially optimize at least one of the Methods to provide a Method access

structure, to associate the Method access structure contiguous to the representation of each of

the Methods, to create a Method routing structure external to the Method access structure and

pointing to the Method access structure for each of the one or more classes in the memory,

and to rewrite invocation bytecodes to a form that includes an indication of the Method

routing structure.

IV.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765.

The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM.

The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571) 272-3756.

The fax phone number for the organization where this application or proceeding is

assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center

(EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
Commissioner for patents
P O Box 1450
Alexandria, VA 22313-1450

VHN